

## **REMARKS**

### **The Specification**

The Specification has been amended to make specific reference to the term ‘front lighting,’ which is now used in the claims for clarity and to define over the prior art. The term “front lighting” is well known in the art as directing light to the surface of an object. The use of such “front lighting” techniques were already present in the Specification, e.g., by use of structure to direct light beams directly onto a label on the outer surface of the container (please see Figures 1 and 2). Thus, the applicant respectfully submits that no new matter has been added to the Specification.

### **Claim Objections**

Claims 1 and 34 (Claim 34 now canceled but rewritten, with suggested amendments, in Independent form as Claim 42) have been amended to correct for informalities.

### **Claim Rejections – 35 U.S.C. § 102**

Claim 31 has been canceled.

### **Claim Rejections – 35 U.S.C. § 103**

**Independent Claims 1 and 30 have been amended to further define the illumination of the outer surface of the container as “front lighting” so as to distinguish over the “Backlighting” technique taught in Dubinin (Claim 1, 6, 10 and 12; and Claim 30).**

Claim 1, and Claims 6, 10, and 12, which depend from Claim 1; and Claim 30 are rejected under 35 USC 102(b) as being unpatentable over Dubinin et al. (WO 01/90640 A1). The Examiner has indicated that Dubinin teaches an illuminating apparatus having a transparent wall

with inner and outer surfaces, and that Dubinin does not specifically disclose the illumination source directing light beams to the outer surface. The Examiner further states that it would have been obvious to one of ordinary skill in the art to realize that a transparent container wall would receive light beams from the *internal* light source, directed on both outer as well as inner surfaces. The applicants respectfully traverse the Examiner's rejection for the following reasons.

A main, important difference between the present invention and that of Dubinin is the issue of "front lighting" versus "backlighting," respectively, which are two *very different* forms of illumination, and which are well understood in the art. When light is shone behind an object, it is termed backlighting (as defined in Merriam-Webster Dictionary: backlighting is "illumination from behind"). This is a common technique in the field of optics, photography and art (painting), which tends to create a dark silhouette of the object, and which shows no color, *detail* or texture. In the case of Dubinin's invention when light travels from the inside to the outside wall, and when there is a label present, the label is said to be "backlighted." This tends to create a dark silhouette of the label. In the case of the present invention, the light is guided directly to the outer surface of the container, and thus to the outer surface of the label (please see Figures 1 and 2). When light is shone directly onto the front of an object, as is the case of the present invention, this is termed "front lighting." This is also a common technique in the field of optics, photography and art (painting). Unlike backlighting, which tends to show no detail, front lighting is known to *enhance fine detail* on the object (such as the detail required in an instructional text label as found on a pill cap container).

Further, for Dubinin's invention to perform as the present invention, that of adequately lighting the surface of a container such that one can read the details on a label, Dubinin's

container must possess two essential features: (1) the wall must be made very transparent so as to pass enough light through the wall to enable the reading of the label; and (2) the label must be *specifically* made to allow light to pass through in defined areas, with enough detail to discern text (e.g., instructional text), and not pass through in other areas (that is, to create contrast for the eye to process). Front lighting avoids this limitation as the light is directed to the outer surface of the container, where it can illuminate, in detail, *any* label without special manufacturing. Nor does the present invention require a transparent container wall – the wall can be made of any material (pharmaceutical pill bottles are normally made from a brown-colored, nearly opaque material, since external ambient light can negatively affect certain medicines; but any bottle material will work). Thus, based on the above, Dubinin's invention would require special modification to function with certain container and label materials, whereas in the claimed invention, any container and label material can be used.

It also known in the field of optics (particularly the display projection area) that backlighting requires more energy to project an image than front lighting. Thus, even if Dubinin's invention could provide the necessary detail to be able to read a label, it would not be as energy efficient as the present invention, which uses front lighting. This is an important aspect of both inventions as both use *small* energy sources that have limited life (e.g., batteries).

Additionally, in Dubinin's invention, if there is any substance within the container that absorbs light, such as medication (pills or capsules, or even opaque liquid), the inside light will never reach the inner or outer surfaces, as it will be absorbed by the substance. Since a main purpose of the present invention is to illuminate instructional text for taking medications, there

will always be medications within the bottle and these will always absorb or block the inner light thus rendering Dubinin's invention ineffective for this application. Front lighting, as implemented in the present invention, avoids this limitation as the light is directed to the outer surface of the container. That is, there is no substance between the illumination source and the label that will absorb the light.

Finally, with the advent of certain instructional labels in the form of a small, multiple-page, peel-back instructional booklet (particularly in the pharmaceutical area), usually with very small print [Paragraph 0049], there would be no way the backlighting in Dubinin's invention could illuminate the top page, or any of the middle pages, of the multiple-page instructional booklet, as the pages between those pages and the container wall would absorb the backlight. The present invention has no such limitation as the front lighting technique guides the light beam directly to any page of the booklet (as the user opens each page).

Therefore, independent Claims 1 and 30 have been rewritten to further define the "front lighting" illumination of the outer surface of the container so as to distinguish over Dubinin, and thus Dubinin does not teach or suggest the present invention. The applicants respectfully submit that the rewritten claims clearly define over the prior art, and therefore, the applicants submit that Claims 1 and 30 and their dependent claims are allowable over the cited references and request reconsideration and allowance.

**Independent Claim 23 has been amended to include the limitation of Claim 26.**

Claim 26 is objected to but would be allowable if rewritten in independent form as suggested by the Examiner. In view thereof, Claim 23 has been amended to include the

limitation of Claim 26. Therefore, Claim 23 and all claims dependent on Claim 23 are now in condition for allowance.

**Wolf does not teach the coupling of an illumination source to the opening of the container or to a cap at the opening of the container (Claims 32-33).**

Claims 32 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,836,476 to Wolf in view of U.S. Publication 2003/00115781 A1 to Boutilier. The applicants respectfully traverse the Examiner's rejection for the following reasons.

Claim 32 has been amended to point out that the illumination source couples to an opening of the container, or to a cap that couples to the opening of the container (please see paragraph [0072] and Figures 21 and 22 of the present application). Wolf does not teach this coupling and therefore, the applicants submit that Claim 32 and its dependent claims are allowable over the cited references and request reconsideration and allowance.

#### **Additional Claim Changes and Cancellations**

Please note that other various claims have been amended to more clearly and completely claim the invention (and include Claims 2, 3; Claims 16, 18, 20, 21, 22; and Claim 24).

In view of the above amendments, Claim 26 has been canceled with its subject matter being incorporated into other claims.

Claims 27-29, and Claim 31 have been canceled without prejudice in order to expedite allowance of the application, with applicant reserving the right to pursue such subject matter in a related application.

Claim 40 has been canceled and replaced with Independent Claim 41 directed to an illuminating cap adapted for front lighting.

### **Allowable Subject Matter**

**Claims 8, 9, 26, 34 and 35 are objected to due to dependence on rejected base claims.**

Claims 8, 9 and 26 have previously been rewritten in Independent form as Claims 36-38, which have been allowed by the Examiner in the present Office Action. Claim 34 has been canceled and rewritten in Independent form as new Claim 42, as suggested by the Examiner. Claim 35 has been canceled with its subject matter being incorporated into other claims.

### **Claims 36-38 are allowed**

Claims 36 and 38 have been amended so that the claim language is more consistent with other claims, and thus should still be in condition for allowance. The applicants acknowledge the allowance of Claim 37 with appreciation.

### **CONCLUSION**

In view of all the above, the applicants respectfully submit that the claims objected to by the Examiner have been appropriately corrected by amending Claims 1 and 34 (Claim 34 now canceled but rewritten, with suggested amendments, in Independent form as Claim 42) to distinguish the container outer surface from the cap outer surface; various claims have been amended to more clearly and completely claim the invention; Independent Claims 1 and 30 have been amended to further define the illumination of the outer surface of the container as “Front Lighting” so as to distinguish over the “Backlighting” technique taught in Dubinin; Claim 23 has been amended to include the limitation of Claim 26 as suggested by the Examiner; Claims 27-29

and Claim 31 have been canceled; Claim 32 has been amended to point out that the illumination source couples to an opening of the container, or to a cap that couples to the opening of the container; Claim 34 has been canceled and rewritten in independent form as new Claim 42 as suggested by the Examiner; Claim 35 has been canceled; Claims 36 and 38 have been amended so that the claim language is more consistent with other claims; Claim 37 is allowed with appreciation; Claim 40 has been canceled; and new Claim 41 has been added.

Accordingly, the applicants respectfully submit that this application is now in full condition for allowance, and prompt allowance is earnestly requested. Should any issues remain outstanding, the Examiner is invited to call the undersigned Agent of record so that the case may proceed expeditiously to allowance.

Very respectfully,



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